



Image

1754

Docket No. 4621B DIV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in re patent application of

Applicant: Tran, et al.  
Serial No.: 10/731,722  
Date Filed: December 9, 2003  
Title: HYDROTHERMALLY STABLE METAL PROMOTED ZEOLITE BETA FOR NOX REDUCTION  
Art Unit: 1754  
Examiner:

March 9, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: 09/712,210  
Filing Date: November 15, 2000

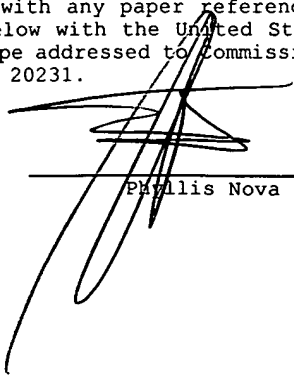
Serial No.: 10/328,370 (Divisional of 09/712,210)  
Filing Date: December 26, 2002

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the date shown below with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, United States Patent and Trademark Office, Washington, DC 20231.

Date: March 9, 2004

  
\_\_\_\_\_  
Phyllis Nova

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) \_\_\_\_\_ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) \_\_\_\_\_ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".
- (c) \_\_\_\_\_ Abstracts by recognized library services.

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a)   X   Within 3 months of the filing date or date of entry into the National Stage.
- (b) \_\_\_\_\_ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 05-1070 for consideration of this Statement.
- (c) \_\_\_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance (37 C.F.R. 1.97(c)).
  - (1) \_\_\_\_\_ The required certification is given below, or
  - (2) \_\_\_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or
  - (3) \_\_\_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 05-1070.
- (d) \_\_\_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.
  - (1) \_\_\_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i) (1), or

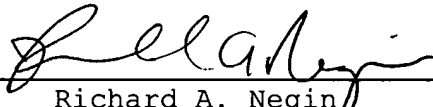
- (2) \_\_\_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 05-1070.

4. Certification (if applicable)

- (a) \_\_\_\_\_ The undersigned hereby certifies that each item of information contained in a communication from a foreign patent office was cited by the foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.
- (b) \_\_\_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 05-1070.

Respectfully Submitted,

By   
Richard A. Negin  
Reg. No. 28,649

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT & TRADEMARK OFFICE

ATTY DOCKET NO. 4621B DIV 7

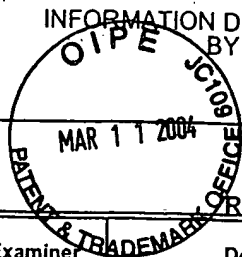
SERIAL NO. 10/731,722

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

APPLICANT: Tran, et al.

FILING DATE: December 9, 2003

GROUP: 1754



## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| Examiner Initial | Document Number | Date    | Name           | Class   | Filing Date if Appropriate |
|------------------|-----------------|---------|----------------|---------|----------------------------|
|                  | 5,242,677 *     | 9/7/93  | Cooper, et al. | 423/714 |                            |
|                  | 4,961,917 *     | 10/9/90 | Byrne, et al.  | 423/239 |                            |
|                  |                 |         |                |         |                            |
|                  |                 |         |                |         |                            |
|                  |                 |         |                |         |                            |
|                  |                 |         |                |         |                            |

## FOREIGN PATENT DOCUMENTS

| Examiner Initial | Document number | Publication Date | Country or Patent Office | Class | Translation |    |
|------------------|-----------------|------------------|--------------------------|-------|-------------|----|
|                  |                 |                  |                          |       | Yes         | No |
|                  |                 |                  |                          |       |             |    |
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|                  |                 |                  |                          |       |             |    |

## OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

|  |  |
|--|--|
|  | He, et al., "Fe-containing mesoporous molecular sieves materials: very active Friedel-Crafts alkylation catalysts" APPLIED CATALYSIS A: GENERAL, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 169, no. 1, 17 April 1998, pages 29-36 *                                    |
|  | Zhang, et al., "Alkylation of phenol with <i>tert</i> -butyl alcohol catalysed by zeolite Hbeta: APPLIED CATALYSIS A: GENERAL, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 166, no. 1, 2 January 1998, pages 89-95 *   |
|  | Buchanan, J.S., "Gasoline selective ZSM-5 FCC additives: Model reactions of C <sub>6</sub> -C <sub>10</sub> olefins over steamed 55:1 and 450:1 ZSM-5" APPLIED CATALYSIS A: GENERAL, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 171, no. 1, 29 June 1998, pages 57-64 * |
|  | Chen, et al., "Reduction of NO <sub>x</sub> over various Fe/zeolite catalysts" APPLIED CATALYSIS A: GENERAL, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 194-195, 13 March 2000, pages 159-168 *   |
|  | Gilot, et al., "A review of NO <sub>x</sub> reduction on zeolitic catalysts under diesel exhaust conditions" FUEL, IPC SCIENCE AND TECHNOLOGY PRESS, GUILDFORD, GB, vol. 76, no. 6, May 1997, pages 507-515 *  |

\*references submitted in previously filed IDS in parent 09/712,210

|          |                 |
|----------|-----------------|
| Examiner | Date Considered |
|----------|-----------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE STATEMENT PTO-1449 (Modified)

Sheet \_\_\_\_\_ of \_\_\_\_\_

Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)

4621B DIV

Application Number

10/731,722

Applicant

TRAN, ET AL

Filing Date

December 9, 2003

Group Art Unit

1754

## U. S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE    | NAME              | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------------------|-----------------|---------|-------------------|-------|----------|-------------------------------|
|                     | 496191*         | 10/1990 | BYRNE             |       |          |                               |
|                     | 502498*         | 6/1991  | SPERDUELO, ET AL. |       |          |                               |
|                     | 512523*         | 6/1992  | PATIL, ET AL      |       |          |                               |
|                     | 516435*         | 11/1992 | ABE, ET AL.       |       |          |                               |
|                     |                 |         |                   |       |          |                               |
|                     |                 |         |                   |       |          |                               |
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|                     |                 |         |                   |       |          |                               |
|                     |                 |         |                   |       |          |                               |

## FOREIGN PATENT DOCUMENTS

| DOCUMENT NUMBER | DATE   | COUNTRY | CLASS | SUBCLASS | Translation |    |
|-----------------|--------|---------|-------|----------|-------------|----|
|                 |        |         |       |          | YES         | NO |
| 441162*         | 5/1994 | WIPO    |       |          |             |    |
|                 |        |         |       |          |             |    |
|                 |        |         |       |          |             |    |
|                 |        |         |       |          |             |    |
|                 |        |         |       |          |             |    |
|                 |        |         |       |          |             |    |
|                 |        |         |       |          |             |    |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|             |  |
|-------------|--|
|             | "PROGRESS TOWARD UNDERSTANDING ZEOLITE B ACIDITY: A <sup>27</sup> AL NMR SPECTROSCOPIC STUDY" BY KIRICSI, J. PHYS. CHEM., 1994, 98, 4627-4634* |
|             | "MECHANISMS OF FORMATION OF EXTRAFRAMEWORK Al <sub>2</sub> O <sub>3</sub> IN ZEOLITES" BY ALVAREZ, ET AL., ELSEVIER SCIENCE, INC., 1997*       |
|             |  |
| *references | submitted in previously filed IDS in parent '09/712,210  |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.